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U1S S1734

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GB 2265165 A GB 2060024 A GB 2038620 A
GB 2036123 A GB 1524515 A US 3860022 A

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(54) Sun umbrella with awning

(57) An umbrella 1 has an awning 2 associated with the covering 4 of the umbrella. The awning includes a canopy 6 associated with the covering 4, attachment means 7 for attaching the canopy to the umbrella in the region of the covering and anchoring means for anchoring the canopy 6 to the ground such that, in use, at least part of the canopy 6 extends outwards beyond and below the covering 4 of the umbrella. The area underneath the region of the canopy which extends beyond the periphery of the covering is at least 50 per cent of the area underneath the covering.

The awning 2 provides increased shade and/or shelter from adverse weather under the umbrella while, because the canopy is anchored to the ground, the stability of the umbrella is not reduced.

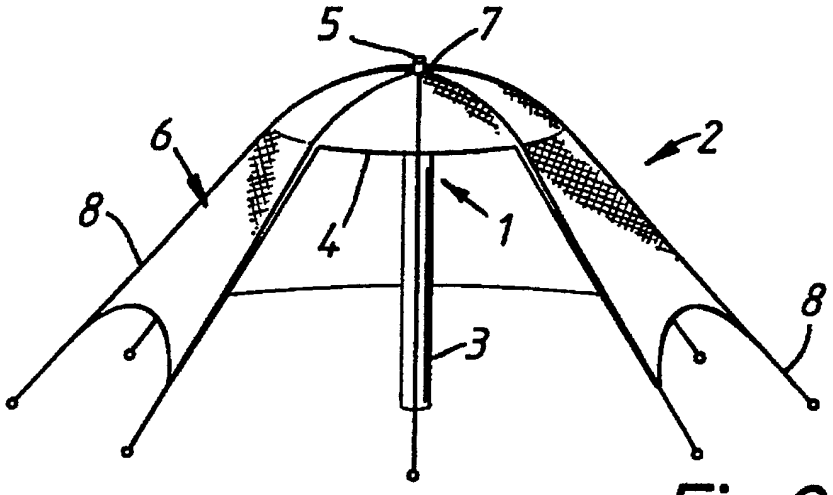

Fig.2

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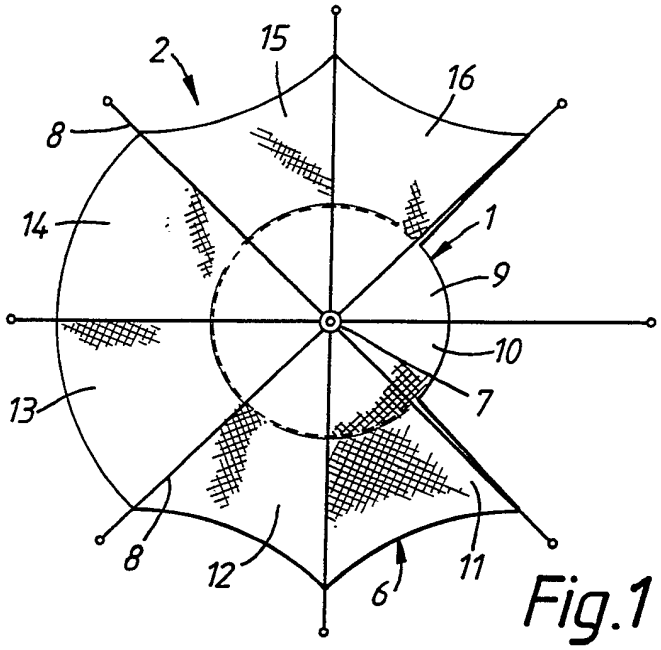

Fig.1

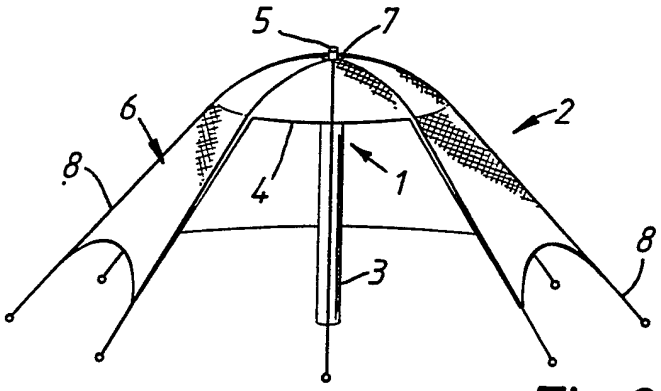

Fig.2

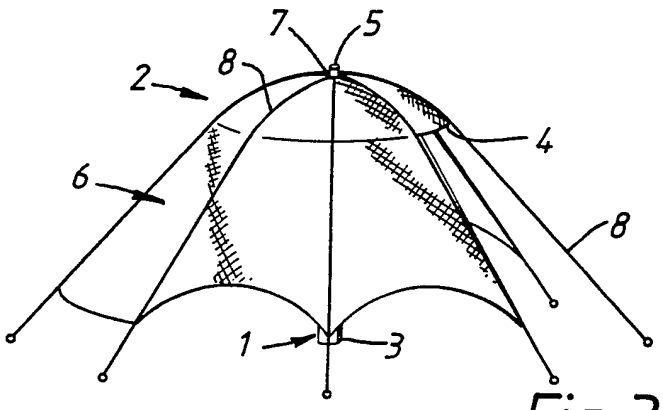

Fig.3

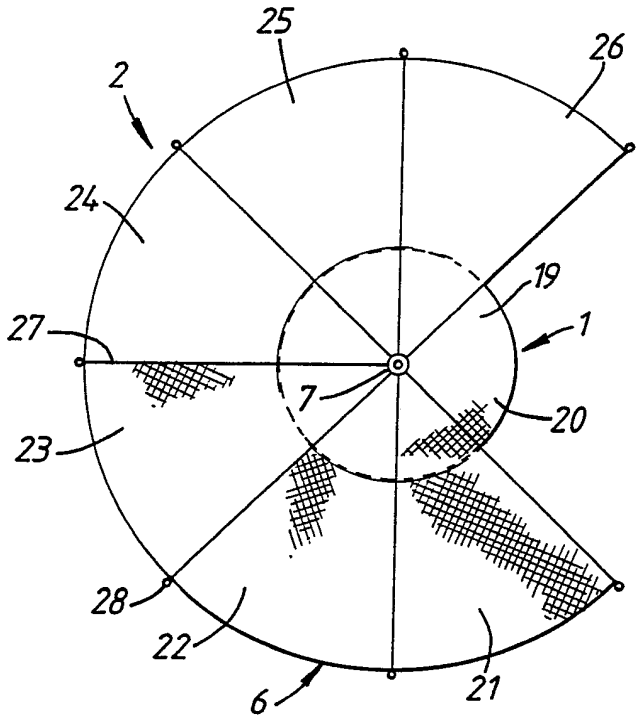

Fig.4

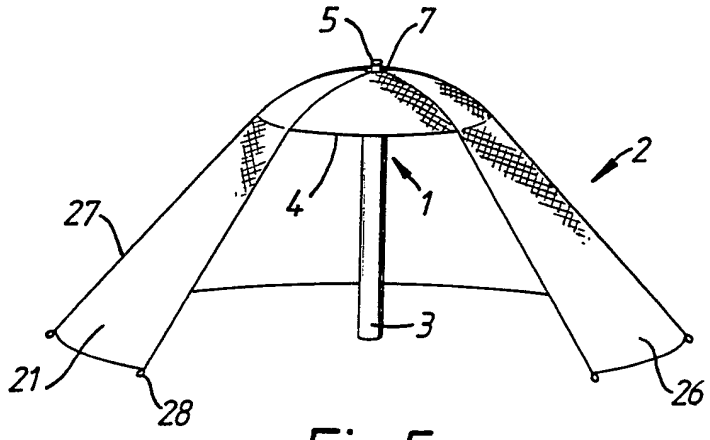

Fig.5

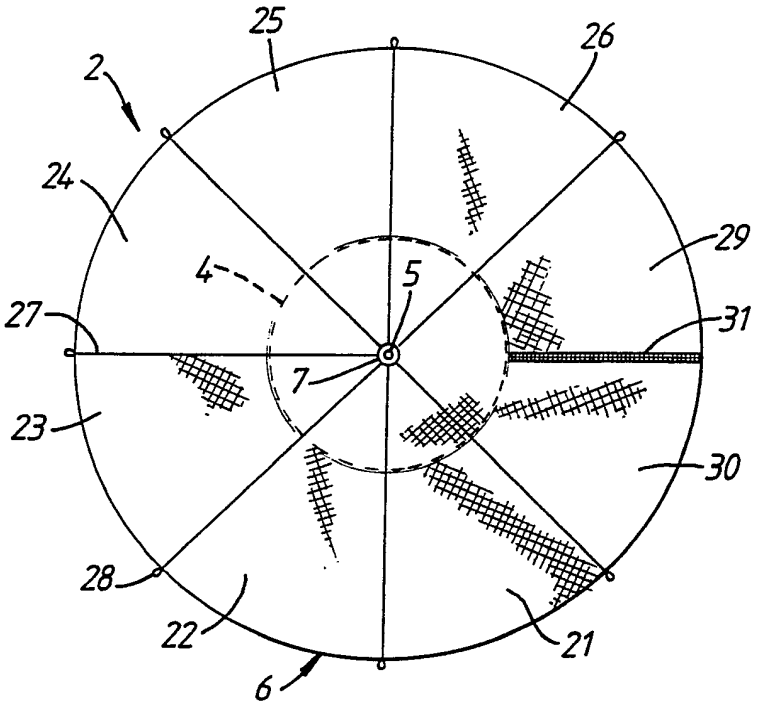

Fig.6

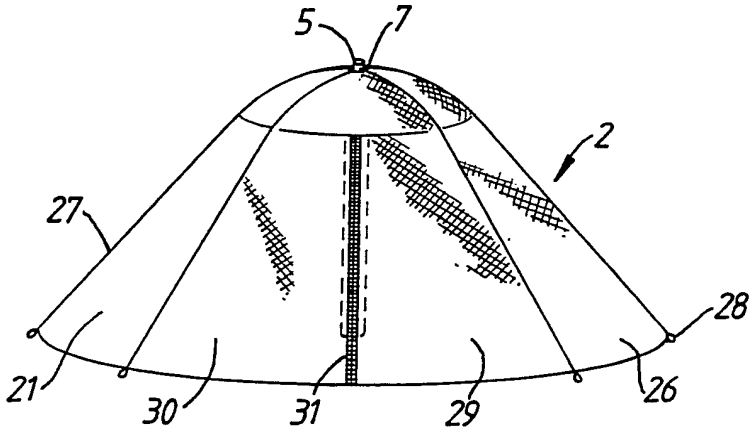

Fig.7

Improvements in and Relating to Sun Umbrellas

This invention relates to a sun umbrella. More particularly, the invention relates to an umbrella including an awning, and to an awning for use with a sun umbrella.

Sun umbrellas are well known and are used to provide shade on beaches, in gardens, parks and outside cafes. The umbrellas comprise a covering stretched across a collapsible frame, the centre of which is attached to one end of a rod which can be fixed to the ground in a substantially vertical orientation by a variety of well known methods. The rod may be pointed at its lower end and simply inserted into the ground or it may be fitted into a heavy base. The rod may be inserted through a hole in the centre of a table such that when the covering of the umbrella is erected, the table and people sitting around the table may be shaded from the sun by the covering.

The size of the covering and therefore the amount of shade provided under a sun umbrella is restricted by a number of factors. If the covering is very large, the umbrella is liable to topple over, especially in a wind. In addition, the radius of the covering is such that, when the umbrella is not in use and the frame is collapsed, the edge of the covering is above the level of the table, if one is used.

The usual size of umbrella covering is adequate for some purposes, especially if the sun is directly overhead, but on some occasions and especially when the sun is lower in the sky, the shade provided by the umbrella is often inadequate.

It is an object of the invention to provide an umbrella that provides increased shade under the umbrella without reducing the stability of the umbrella.

It is a further object of the invention to provide an umbrella that provides increased shelter from rain and wind under the umbrella without reducing the stability or portability of the umbrella.

According to the invention there is provided an umbrella with an awning associated with the covering of the umbrella, the awning including a canopy associated with the covering, attachment means for attaching the canopy to the umbrella in the region of the covering and anchoring means for anchoring the canopy to the ground such that, in use, at least part of the canopy extends outwards beyond and below the covering of the umbrella, the area underneath the region of the canopy which extends beyond the periphery of the covering being at least 50 per cent of the area underneath the covering. The region of the canopy which extends beyond the periphery of the covering provides increased shade and/or shelter from adverse weather under the umbrella while, because the canopy is anchored to the ground, the

stability of the umbrella is not reduced; indeed it is increased.

Advantageously, the awning is detachable. Preferably, the canopy is fitted over a projection at or near the centre of the covering. Preferably, the means for attaching the canopy to the projection is a ring fixed to the canopy. The ring is easily located over the projection, and provides a secure attachment.

Advantageously, the anchoring means are ropes extending from the periphery of the canopy. Preferably the ropes extend from the attachment means to the ground. The location of the ropes over the covering of the umbrella gives extra stability.

Advantageously, the anchoring means are attached to the ground by pegs. As discussed below, the ropes may be anchored to the ground by a variety of methods. Preferably, the length of the ropes is adjustable. The ropes can therefore be anchored at a variety of positions in the region around the umbrella.

Advantageously, the canopy comprises sections which are preferably of different sizes. The canopy can therefore be orientated such that some larger sections face the sun while other smaller sections allow ventilation and light under the umbrella.

Advantageously, the region of the boundaries between the sections is stiffer than the substantial proportion of the sections. Those regions may be seams between two

adjacent sections. The presence of those seams increases the stiffness of the canopy in those regions and in some cases increased stability of the canopy may be achieved without the use of ropes described above.

Preferably, the size of at least one section is such that, in use, that section of the canopy does not extend beyond the periphery of the covering. That section can therefore be used as a doorway. Preferably, the size of at least one section is such that, in use, the bottom of that section is substantially at ground level. That section provides a large amount of shade and/or protection from adverse weather.

If the umbrella and awning are to be used as protection from adverse weather, the size of at least three quarters of the sections is such that, in use, the bottom of those sections is substantially at ground level.

Preferably, the size of at least one section is such that, in use, the bottom of that section is beyond and below the periphery of the covering but above ground level. That section provides increased shade while allowing air to pass freely under the section.

Alternatively, the size of the sections is such that, in use, substantially all of the bottom of the canopy is substantially at ground level. Advantageously, at least one section is releasably attached to at least part of one other section. If all the canopy is

substantially at ground level, a fastening means, for example a zip, is preferably provided for the releasable attachment of sections to provide a door in the canopy.

Advantageously, the canopy covers the whole of the covering. That allows easy erection of the umbrella and awning and also the awning can be used with any size of umbrella.

Preferably, the canopy is made from a flexible material. The canopy may comprise a woven fabric which may consist substantially of cotton or nylon or the canopy may comprise plastic sheeting. The canopy may be waterproof. Preferably, at least part of the canopy comprises a transparent material.

The area underneath the region of the canopy which, in use, extends beyond the periphery of the covering is advantageously at least 100 per cent of the area underneath the covering of the umbrella. In such a case the canopy at least doubles the area of shade under the umbrella in the case where the sun is directly overhead.

Advantageously, in use, at least a portion of the part of the canopy which extends outward beyond and below the covering of the umbrella extends outwards and downwards to an angle to the horizontal in the range of 30° to 60°. At such an angle there is a substantial area underneath the extending portion thereby providing a significant increase in shade but there is also a significant lowering of the outward edge of the canopy

towards the ground.

According to the invention there is also provided an awning for use with the covering of an umbrella, the awning including a canopy, means for attaching the canopy to the umbrella in the region of the covering and means for anchoring the canopy to the ground.

Various embodiments of the invention will now be described by way of example with reference to the accompanying drawings of which:

Figure 1	is a view from above of an umbrella with an awning
Figure 2	is a view from the front
Figure 3	is a view from the side
Figures 4a and 4b	show an alternative form of the awning
Figures 5a and 5b	show a further alternative form of the awning

The Figures show an umbrella 1 including a detachable awning 2.

The umbrella is of a well known type and comprises a rod 3 and a covering 4 on a collapsible frame (not shown). In the centre of the covering 4, extending perpendicularly outwards, is a projection 5.

The awning 2 comprises a canopy 6, the shape of which, when draped over the covering of the umbrella, is shown in Figure 1. The shape of the canopy can be thought of as essentially a circle divided into a number of

sections 9 to 16, the sections having portions removed from the circumferential edge. A circular ring 7 is fixed at the intersection of the sections of the canopy and is used to attach the awning to the umbrella as described below.

At the junction of adjacent sections, there are ropes 8 to which the canopy is attached and which extend from the ring 7 radially outwards across the canopy and beyond the edge of the canopy.

To erect the awning and the umbrella, the canopy is draped over the covering of the umbrella (that step is more easily performed if the frame supporting the covering is in the collapsed position). The ring 7 is located over the projection 5 and the covering of the umbrella is erected. To give extra stability to the umbrella, the number of sections of the canopy is the same as the number of arms of the frame of the umbrella (usually eight) and the ropes 8 are located at the arms of the frame.

When erected, the awning extends beyond the periphery of the covering of the umbrella. The ropes 8 are fixed to the ground by pegs such as those usually used for erecting tents, and the length of the ropes may be adjustable. It is possible, if the umbrella is to be erected on a surface into which pegs cannot be driven, for the ropes to be weighted down by stones, or other objects. For that purpose, the ends of the ropes may

include an attachment which may be easily held under the object.

The canopy as shown in Figure 1 is symmetrical, thus sections 9 and 10, sections 11 and 16, sections 12 and 15 and sections 13 and 14 are of the same shape.

Sections 9 and 10 are of a similar radial length as the radius of the covering and thus form a doorway to the area under the awning. Sections 13 and 14 are substantially longer such that, when the covering of the umbrella is erected, they are substantially at ground level. The length of those sections provide increased shade, even when the sun is low in the sky and can also provide shelter from any wind from that direction. The remaining two pairs of sections (sections 11 and 16, and sections 12 and 15) are of intermediate length and therefore provide increased shade while still allowing ventilation and light under the awning.

In the illustrated embodiment the ropes and the canopy extend outwards and downwards beyond the covering of the umbrella at an angle of about 45° to the horizontal. The total area underneath parts of the sections 11 to 16 that extend beyond the covering of the umbrella is more than the area underneath the covering of the umbrella so that the canopy more than doubles the area of shade under the umbrella in the case where the sun is directly overhead.

A number of modifications can be envisaged to the

embodiment described above. For example, the canopy may not extend across the covering but may be attached to the ropes 8 at the periphery of the covering, or the canopy may itself be attached to the periphery of the covering. In that way, less material is needed for the canopy.

The material used for the canopy may be any suitable fabric or plastic sheeting that would provide shade, preferably a light material which may be waterproof.

Figures 4 to 7 show alternative designs of the awning 2. As for the design shown in Figures 1 to 3, the awning 2 comprises a canopy 6 which is draped over the covering of the umbrella, the canopy being divided into a number of sections 19 to 26 (corresponding to sections 9 to 16 of the canopy shown in Figs. 1 to 3). The awning may be secured to the umbrella using a ring 7 located over the projection 5 of the umbrella as described for Figures 1 to 3. In the case of the awning shown in Figures 4 to 7 the sections 21 to 26 are of substantially the same shape and are of a size such that when the awning is secured to the umbrella and the umbrella is erected as shown in Figures 5 and 7 the canopy is of a sufficient length that it may be secured to the ground with the lower edge of the canopy being substantially at ground level. The canopy 6 includes loops of rubber material 28, by means of which the canopy may be secured to the ground using pegs (not shown). Extra strength and stability of the awning is obtained by

locating seams 27 in the canopy along the arms of the frame of the umbrella; the seams extend to the lower edge of the canopy and the loops 28 are located at or adjacent to the seams. The seams 27 give extra strength and stiffness to the canopy. Where pegs cannot be inserted into the surface on which the umbrella is erected, alternative methods for securing the canopy may be used as described above.

For the awning shown in Figures 4 and 5, sections 19 and 20 of the canopy are of a similar radial length as the radius of the covering and thus form a doorway to the area under the awning.

In the awning shown in Figures 6 and 7, sections 29 and 30 of the canopy are of a shape similar to that of the sections 21 to 26 and therefore the lower edges of sections 29 and 30 are substantially at ground level when the umbrella and the awning are erected. The adjacent edges of the sections 29 and 30 are releasably joined by means of a zip 31 such that a temporary opening may be formed in the canopy for entry to or exit from the area underneath the canopy. Strings (not shown) may be provided at the seam 27 between sections 26 and 29 and/or at the seam between sections 21 and 30 for tying back the sections 29 and 30 once the zip 31 has been opened, to provide a more permanent opening.

Awnings as shown in Figs. 4 to 7 may be used when increased protection from, for example, rain and wind is

required. Greater protection is provided because most of the sections of the canopy extend to ground level. The arrangement shown in Figs. 4 and 5 may, for example, be used where protection from weather is required while fishing. In that case the umbrella may be of a type usually used as an umbrella when fishing and may be erected in the usual way; the canopy will be constructed using a waterproof material, at least part of which may be transparent to allow light under the awning.

The arrangement shown in Figures 6 and 7 may, for example, be used where privacy is preferred. Such an arrangement may be used, with the zip 31 closed, at the beach as a beach hut.

Claims

1. An umbrella and an awning associated with the covering of the umbrella, the awning including a canopy associated with the covering, attachment means for attaching the canopy to the umbrella in the region of the covering and anchoring means for anchoring the canopy to the ground such that, in use, at least part of the canopy extends outwards beyond and below the covering of the umbrella, the area underneath the region of the canopy which extends beyond the periphery of the covering being at least 50 per cent of the area underneath the covering.

2. An umbrella and awning according to claim 1 wherein the awning is detachable.

3. An umbrella and awning according to claim 1 or 2 wherein the canopy is fitted over a projection at or near the centre of the covering.

4. An umbrella and awning according to claim 3 wherein the means for attaching the canopy to the projection is a ring fixed to the canopy.

5. An umbrella and awning according to any preceding claim wherein the anchoring means are ropes extending from the periphery of the canopy.

6. An umbrella and awning according to claim 5 when dependent on claim 3 or claim 4 wherein the ropes extend from the attachment means to the ground.

7. An umbrella and awning according to any preceding claim wherein the anchoring means are attached to the ground by pegs.

8. An umbrella and awning according to any preceding claim wherein the length of the anchoring means is adjustable.

9. An umbrella and awning according to any preceding claim wherein the canopy comprises sections.

10. An umbrella and awning according to claim 9 wherein the region of the boundaries between the sections is stiffer than the substantial proportions of the sections.

11. An umbrella and awning according to claim 9 or 10 wherein the size of at least one section is such that, in use, that section of the canopy does not extend substantially beyond the periphery of the covering.

12. An umbrella and awning according to claim 9, 10 or 11 wherein the size of at least one section is such that, in use, the bottom of that section is substantially at

ground level.

13. An umbrella and awning according to claim 12, wherein the size of at least three quaters of the sections is such that, in use, the bottom of those sections is substantially at ground level.

14. An umbrella and awning according to any one of claims 9 to 13 wherein the size of at least one section is such that, in use, the bottom of that section is beyond and below the periphery of the covering but above ground level.

15. An umbrella and awning according to claim 9, wherein the size of the sections is such that, in use, substantially all of the bottom of the canopy is substantially at ground level.

16. An umbrella and awning according to any of claims 9 to 15 wherein at least one section is releasably attached to at least part of one other section.

17. An umbrella and awning according to any preceding claim wherein, in use, at least a portion of the part of the canopy which extends outward beyond and below the covering of the umbrella extends outwards and downwards at an angle to the horizontal in the range of 30° to 60°.

18. An umbrella and awning according to any preceding claim wherein the canopy covers the whole of the covering.

19. An umbrella and awning according to any preceding claim wherein the canopy is made from a flexible material.

20. An umbrella and awning according to any preceding claim wherein the canopy comprises a woven fabric.

21. An umbrella and awning according to claim 20 wherein the fabric consists substantially of cotton or nylon.

22. An umbrella and awning according to any of claims 1 to 19 wherein the canopy comprises plastic sheeting.

23. An umbrella and awning according to any preceding claim wherein the canopy comprises a waterproof material.

24. An umbrella and awning according to any preceding claim wherein at least part of the canopy comprises a transparent material.

25. An awning for use with the covering of an umbrella, the awning including a canopy, means for attaching the

canopy to the umbrella in the region of the covering and means for anchoring the canopy to the ground.

26. An awning according to claim 25 and being suitable for use as the awning of the umbrella and awning according to any of claims 1 to 24.

27. An umbrella and awning substantially as herein described with reference to and as shown in Figures 1 to 7.

28. An awning for use with an umbrella, the awning being substantially as herein described with reference to and as shown in Figures 1 to 7.

Patents Act 1977
Examiner's report to the Comptroller under Section 17
(The Search report) 17

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Relevant Technical Fields

(i) UK Cl (Ed.N) E1D DF191, DF185, DF194, DF196, DGS, A4P PAA

(ii) Int Cl (Ed.6) E04H A45B

Search Examiner
J D CANTRELL

Date of completion of Search
12 JANUARY 1995

Databases (see below)
(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

(ii) ON-LINE: WPI

Documents considered relevant following a search in respect of Claims :-
1-28

Categories of documents

X: Document indicating lack of novelty or of inventive step.

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A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

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Category	Identity of document and relevant passages		Relevant to claim(s)
X	GB 2265165 A	(SHELDON)	25
X	GB 2060024 A	(CASCADE)	25
X	GB 2036123 A	(LEE)	1, 2, 7, 9, 10, 13, 15, 16, 19, 20, 23, 25
X	GB 2038620 A	(ORANGE)	25
X	GB 1524515	(PRESTON)	25
X	US 3860022	(ARNDT)	1, 7, 19-21

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